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The incentives of China's urban land finance

Wu Qun[a], Li Yongle[b], Yan Siqi[c,*]

[a] China Centre for Land Policy Research, Nanjing Agricultural University, 210095 Nanjing, China
[b] School of Public Administration, Nanjing University of Finance and Economics, 210023 Nanjing, China
[c] School of the Built Environment, University of Technology, Sydney, NSW 2037, Australia

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ABSTRACT

Land grant premiums and land tax revenues have become two major sources of fiscal revenue for city governments in China. This type of fiscal revenue strategy for city governments is generally referred to as "land finance", and it has drawn increasing research attention in recent years. This paper explores the institutional causes of the "land finance" strategy of city governments in China. We first analyze the institutional foundation of "land finance" (including China's urban land use system and land expropriation system). We then propose two hypotheses about the institutional causes of "land finance". The first hypothesis is that the current system of fiscal decentralization is a major reason city governments choose the "land finance" fiscal strategy. The second hypothesis is that under the current personnel control system, which uses local economic performance as the most important indicator for evaluating local government officials, the competition between city governments to promote local economic growth is another major reason city governments choose the "land finance" fiscal strategy. We test the hypotheses by estimating econometric models using data for 31 provincial-level regions for the period 1999–2008. The empirical results suggest that fiscal decentralization and competition between city governments to promote economic growth are two major causes of "land finance".

Introduction

Land grant premiums have increased noticeably from 51.43 billion yuan in 1999 to 1591.02 billion yuan in 2009 in China (with an annual growth rate of 40.94%) and have become an important source of extra-budgetary revenues for city governments (see Table 1).[1] According to an investigation conducted by the "China Land policy Reform" research group (which is set up by the Development Research Centre of the State Council) between 2003 and 2006 in Jiangsu province, Zhejiang province and Guangdong province, land tax revenues and other tax revenues brought about by urban expansion accounted for 40% of the budgetary revenue, and land grant premiums comprised 60% of the extra-budgetary revenue. According to another investigation conducted by the China Index Academy, the sum of land grant premiums in 70 Chinese cities amounted to 1080 billion yuan in 2009. Among those 70 cities, Hangzhou was the city with the highest land grant premiums (105.4 billion yuan), followed by Shanghai (104.3 billion yuan) and Beijing (92.8 billion yuan). Land grant premiums and land tax revenues have become two major sources of fiscal revenue for city governments. This type of fiscal revenue strategy for city governments is often referred to as "land finance". "Land finance" has drawn increasing attention from scholars and the public in recent years, and there are many opponents of "land finance". It is argued that "land finance" is a type of myopic behavior that is like "catching the fish by draining the pool" (Huang, 2010); it can erode intergenerational equity (Cheng, 2009), violate the principle of sustainable development, push up housing prices (Zhou and Du, 2010), challenge the red line of maintaining an amount of cultivated land greater than 0.12 billion hectares (Du and Huang, 2009), and pose barriers to legislation on land expropriation.[2] It is also suggested that "land finance" poses a substantial risk to financial and economic stability.

* Corresponding author. Tel.: +61 4 5219 8658.
E-mail address: siqi.yan@student.uts.edu.au (Y. Siqi).

[1] Land ownership is divided into two categories in China: state land ownership and collective land ownership. Urban land is owned by the state, and rural land is owned by the rural collective economic organization. Land use rights (LURs), meaning the rights to use a parcel of land (subject to regulatory constraints) for a certain time period, is separated from land ownership, and only LURs, not land ownership, is tradable. The land users pay a lump-sum up-front land grant premium when the city government grants the LURs to them.

[2] "Land finance poses barriers to the legislation on land expropriation compensation". *Source*: http://politics.people.com.cn/GB/1026/12750311.html.

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Table 1
The percentage of land grant premiums in city governments' revenue in major Chinese cities in 2009.

City	Land grant premium (unit: billion yuan) (1)	Local government's revenue (unit: billion yuan) (2)	(1)/(2) × 100%	City	Land grant premium (unit: billion yuan) (1)	Local government's revenue (unit: billion yuan) (2)	(1)/(2) × 100%
Hangzhou	105	52	202.38	Changzhou	18	22	81.86
Foshan	33	25	130.71	Wuxi	32	>40	78.75
Xiamen	30	24	125.96	Guangzhou	49	70	69.60
Wuhan	36	32	114.20	Dalian	26	40	65.46
Ningbo	49	43	112.75	Nanjing	24	43	55.69
Shenyang	30	32	92.19	Beijing	93	203	45.78
Chengdu	32	36	90.50	Qingdao	16	38	41.11
Tianjin	73	82	89.12	Shanghai	104	254	41.05
Jinan	18	21	87.14	Chongqing	44	117	37.75
Hefei	15	18	85.13	Suzhou	28	75	36.90

Source: "Land finance" in China in 2009, Brand & Standardization, 2010, no. 5, pp. 16.

What are the reasons for the emergence of "land finance"? Are there any institutional driving forces behind "land finance"? The tax reform in 1994 led to a reallocation of the nation's total tax revenue between the central and local governments. There was a significant decrease in the tax revenue share for city governments; however, the fiscal pressure on city governments to provide public services (such as education and medical care) and infrastructure did not decrease at the same time. Under this situation, city governments had to make a choice between reducing public expenditure and finding new sources of extra-budgetary revenue. If city governments find new sources of extra-budgetary revenue, they have to make another choice between increasing extra-budgetary revenue through "land finance" and increasing extra-budgetary revenue through "enterprise finance" (which means increasing extra-budgetary revenue by promoting the development of local enterprises). Existing literature has studied the topic of "land finance" from different point of views. However, relatively few studies (especially empirical studies using econometric approaches) have explored the possibilities that some features of China' political system, fiscal system and government structure can be causes of "land finance". We argue that the current system of fiscal decentralization and competition between city governments to promote local economic development are the two primary causes of "land finance". Although some studies have mentioned the institutional foundation of the "land finance" strategy (for example, Wang (2010) suggest that the reform of China's fiscal system and land use system can reduce the city governments' reliance on "land finance"; Jin and Ding jing (2010) suggest that the urban land use system and land expropriation system create the institutional foundation of the "land finance" strategy), there has been no systematic analysis of the topic. In this paper, we analyze the institutional foundation of "land finance" and provide some background knowledge for explaining the institutional causes of "land finance" at first. We then present two research hypotheses concerning the institutional causes of "land finance" and estimate econometric models using data for 31 provincial-level regions for the period 1999–2008 to test the hypotheses. The rest of the paper is organized as follows. In Section 'The institutional foundation and background of "land finance"', we analyze the institutional foundation of the "land finance strategy". In Section 'The two institutional causes of "land finance": research hypotheses and test', we explore the institutional causes of "land finance" and test two research hypotheses by estimating the econometric models. In Section 'The effects of "land finance": excessive rural urban land conversion', we examine the effect of "land finance", emphasizing the effect of "land finance" on rural-urban land conversion. Conclusion and policy implications are presented in the last section.

The institutional foundation and background of "land finance"

If land is used without payment (such as before the implementation of the reform and opening-up), land grant premiums will not comprise a major proportion of extra-budgetary revenue; if collectively-owned land cannot be easily expropriated at a low price, rapid urban expansion will not be possible. Thus, attention should be paid to the institutional foundation of "land finance" (such as China's urban land use system and land expropriation system). Without the institutional setting, there is no chance for city governments to implement the "land finance" strategy, even if they t cannot make both ends meet. In addition, Land expropriation and the conveyance of land use rights are implemented by city governments who act as a representative of the central government (According to *the Provisional Ordinance on the Conveyance and Transfer of Land Use Rights over State-owned Urban Land* issued by the State Council in 1990, the city governments are responsible for conveying Land use rights to urban land users). Thus, the relationship between the central government and city governments in land management is a type of principal-agent relationship, with city governments being the agent of the central government. According to the principal-agent theory, the agent's behaviors have the following characteristics. First, when the agent faces different tasks assigned by different principals, the agent will choose to complete the task assigned by the principal who favors the agent most. Second, when the agent faces different tasks assigned by one principal, the agent will choose to complete the task which favors the agent most. City governments face different tasks assigned by the central government, such as promoting economic growth, increasing tax revenue, conveying land use rights, protecting agricultural land, building urban infrastructure, and maintaining social stability, and it is reasonable to argue that they will make greater effort to complete the tasks that favor themselves most (such as making use of the right of conveying land use rights). The reform of the urban land use system has made it possible for city governments to use the revenues from land sales to conduct urban construction. In 1979, the National People's Congress enacted the *Law on Chinese-Foreign Equity Joint Ventures*, which stipulated that land use rights can be conveyed to foreign investors. The enactment of this law ended a period that was characterized by free and non-transferable land use rights. In 1990, the State Council enacted *Interim Regulations Concerning the conveyance and Transfer of the Right to the Use of the State-Owned land in the Urban Areas*, which marked the establishment of the urban land market system. Land premiums have become an important source of city government revenue since then.

In 1987, the land use rights for two parcels of residential land were conveyed by negotiation and tender in Shenzhen (the land